REMARKS

With respect to the rejections of claims 16-19, and 30-32 under 35 U.S.C. §112, first paragraph and second paragraph, claim 16 has been amended to overcome these rejections by canceling the feature of "a non-polar endcap group". Amended claim 16 is now directed to a lubricating layer having a photocrosslinking functional group. Thus the rejections under 35 U.S.C. 112 should be withdrawn.

Claims 16-19 stand rejected under § 103(a) on the basis of Matsunuma '738 in view of Wright '530, Burguette '699 in view of Nohr et al. '550, and Lyons et al. '864 in view of Lewis '504. Claim 16 has been amended to avoid these references, and Applicants respectfully traverse because the cited references do not disclose (or suggest) a lubricating layer that is excited optically in an ambient containing oxygen with a concentration of 10ppm or less.

The present invention provides a method of forming a magnetic disk having an improved lubricating film. Among other things, the present invention optically excites the lubricating layer in an ambient containing oxygen with a concentration of 10ppm or less, as disclosed on page 35, line 10 of the specification.

As a result of controlling the concentration of the ambient (in which the optical excitation of the lubricating layer is made) to 10ppm or less, energy losses of the ultraviolet radiation used for the optical excitation are suppressed. This suppression of the energy losses facilitates a pure crosslinking reaction.

None of the references disclose or suggest optically exciting the lubricating layer in an ambient containing oxygen with a concentration of 10ppm or less. Thus, Applicants request that the § 103(a) rejection be withdrawn.

Further, new claims 33-42 have been added. Independent claim 33 recites a method of making a magnetic disk having a carbon film having a thickness of 8nm or less as an underlayer of the lubricating layer, as disclosed on page 48, line 25 to page 49, line 5 of the specification. None of the references disclose or suggest this feature.

By reducing the thickness of the carbon film to 8nm or less, it is possible to reduce the magnetic spacing on the disk. Further, by using short wavelength radiation to cause optical crosslinking on a carbon film of 8 nm or less, it is possible to obtain the predetermined bond ratio in the lubrication film, as shown in Table I of the specification. Since Applicants submit that none of the references disclose or suggest a carbon film having a thickness of 8nm or less as an underlayer of the lubricating layer, Applicants respectfully request allowance of claim 33 and depending claims 34-37.

With respect to new independent claim 38, claim 38 recites a method of making a magnetic disk where the lubricating layer is dipped in a solvent, as disclosed on page 37, line 20 of the specification. Applicants submit that none of the references disclose or suggest this feature.

In the present invention, the unreacted, mobile part of the lubricating film is removed by dipping the lubricating film in a solvent after the optical crosslinking reaction. By removing the mobile part, serious problems caused by air gaps formed between the

magnetic disk surface and the magnetic head are reduced and the rotational speed of the magnetic disk is increased.

For the foregoing reasons, Applicants believe that this case is in condition for allowance, which is respectfully requested. The Examiner should call Applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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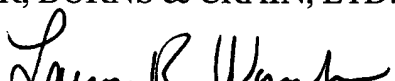
By 
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